PUB. No. 152 3M-5-61

CORN SPURRY CONTROL IN ALBERTA

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CORN SPURRY
(Spergula arvensis)

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Description

Corn Spurry, also known as Devil's-gut, sandweed, and pick-purse, is an annual introduced from Europe. The stems which curve upward, and branch from the base, are 6 to 18 inches high, sparsely hairy, and somewhat sticky. The leaves are narrow and linear, 1 to 2 inches long, and are borne in whorls around the stem, with scale-like modified leaves between them. The flowers are white, 1/4-inch across, open in sunshine, and grow in clusters with central flowers opening first; the tiny seed boles hang downward.

The seed is very small, dull black, lens shaped, or round and compressed into a narrow pale wing. The surface of the seed is somewhat roughened, with small, hair-like formations on them.

Corn Spurry propagates by seed only, flowers in July, and the seeds ripen in July and August.

It is becoming widely distributed in the park areas of Alberta. It is seldom found on the prairies in southern Alberta, but usually occurs on sandy acid soils, and on wet, acid, cultivated peat soils. Habitats of this weed are grain fields, cultivated fields, gardens and roadsides.

Habitats of Growth

Corn Spurry does not appear to be very persistent on grasslands. It has been observed that it is more prevalent in oats, less prevalent in barley and wheat, and least prevalent in grass and clover crops.

Corn Spurry is a prolific seed producer. The seeds retain their vitality for a long time when lying dormant in dry soil. Growth is very rapid, and may smother out root crops, young grasses or clovers, and grain. The plant matures early in the season, and drops the seeds during the late summer and fall.

Control Measures

(a) Cultural

Harrow the growing crop in the spring.
Sow clean seed.
Pasture with sheep while plants are young.
Disc or harrow grain fields after the crop is removed, to induce seed to germinate.
Grain or clover crops may follow a well tilled cultivated crop.

Badly infested areas should be summerfallowed by giving a light surface cultivation in the fall or early spring. When the corn spurry plants appear, cultivate with a narrow-toothed cultivator, or duck-foot cultivator if suitable. Repeat the cultivation as new plants emerge. Each cultivation should go a little deeper to bring up more seeds of the plant to a place in the soil where they will germinate. Deeply buried seed will not germinate; therefore, summerfallow should not be plowed deeply until the seeds near the surface have grown out. If the season is at all moist, this system of eradication will prove effective.

(b) Chemical

Corn Spurry is resistant to 2,4-D and MCPA treatments.

Neburon at 3 lb./A applied when weeds were 2 - 3 inches tall resulted in 85% elimination. Diruon at 2 lb./A - 100% control; 3(3,4-dichlorophenyl-1-1-diethylurea) at 2 lb./A and CMPP and MCP ester at 12 oz./A give satisfactory control. CP 1815 at 12 oz. will also effect control. 80 gallons of water per acre was used as a diluent in the trials.